

cases of altered writing from syphilitic cerebral lesions, and the use of strychnine in those from chronic alcoholism, give the best results.

IMMORAL CONDUCT AS A SYMPTOM OF PARETIC DEMENTIA.—In 1882 the New York State Medical Society, at the instigation of Dr. J. P. Gray, passed the resolution that the physician was not justified drawing conclusions from moral manifestations of conduct, that department belonging exclusively to law. It has been well said by Dr. Hughes, that it was an absurdity for medical societies to define the province of any department of science. The absurdity of such resolutions is shown by the following cases of immoral conduct ushering in paretic dementia, which are reported by Legrand du Saulle (*Gazette des Hôpitaux*, Sept. 11, 1883). A rich functionary was arrested in a shop at the moment while putting into his pocket without payment two porcelain articles of insignificant value. He was soon found to be a paretic dement. A highly respected notary, who had exercised his calling with honor for years, suddenly indulged in dishonorable practices, and was obliged to abandon his calling; he then became a wine merchant, ran through \$50,000 in eighteen months, and died a paretic dement. A cashier became careless, apathetic, neglected his accounts, and then "forced" them; began to frequent places of doubtful repute; stealing to fill his pocket-book. He died from one of the apoplectic attacks so frequent in paretic dementia, and his family were obliged to repay his employers \$5,000 lost or taken by him. One case of stealing as a prodromic symptom of paretic dementia was reported in the JOURNAL OF NERVOUS AND MENTAL DISEASE, volume viii., and as Legrand du Saulle says, violations of public decency and outrages may also be prodromic symptoms of paretic dementia.

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c.—THERAPEUTICS OF THE NERVOUS SYSTEM.

THE TREATMENT OF RHEUMATIC FACIAL PARALYSIS.—Dr. Moritz Meyer recommends a mode of treatment for this affection which, he claims, hastens recovery, which, according to Erb, is not the case with the ordinary mode of treatment. Meyer states that in almost every case which he has examined he has found, by pressing with his finger behind and beneath the ramus of the jaw, close to the foramen stylo-mastoideus, the nerve itself or the surrounding tissue swollen and painful. By comparison with the other side, this condition is easily made out. In these cases he applies at this spot some leeches and hot applications, and then, after a few days, the anode of the galvanic current of medium strength. After each sitting he is able to make out a diminution of the exudation, and a corresponding increase of motility, and,

finally, a cure is more rapidly attained.—*Berlin. klin. Wochen.*, 1884, No. 5.

SNAKE-POISON AS A REMEDY FOR TETANUS.—This rather heroic treatment was employed by Dr. A. O. Ameden, after the usual remedies had failed, in an aggravated case of tetanus following a wound of the foot. It occurred to Dr. Ameden that the physiological effects of rattlesnake-poison would be antagonistic to tetanus. Accordingly, living in a neighborhood where rattlesnakes abound, he had one caught and killed, and obtained some fresh poison from the gland. With this the point of a hypodermatic needle was moistened, and a puncture made in the back. Symptoms of snake-poisoning rapidly followed, with a decided amelioration of the tetanic spasms and rigidity which entirely ceased at the end of ten hours, and the patient was able to sleep for six hours. Thirty hours later, rigidity with slight spasm returned, and a second puncture was made. The spasms then entirely ceased and did not return, but the prostration of snake-poisoning became very marked and required active treatment. No local effects about the wound occurred. Recovery took place. Considering the failure of all other means in this case the effect was striking.

Dr. A. thinks that the poison (crotaline) can be used with comparative safety, but we should want to be sure of our prognosis before resorting to such heroic treatment.—*Med. News*, Sept. 29, 1883.

A CASE OF TRAUMATIC TETANUS TREATED WITH CURARE.—Dr. Ed. Gontermann reports a severe case of tetanus which recovered under this treatment. Chloral had been given without effect. Curare was then given subcutaneously in doses of 0.25–0.75 of a two-per-cent. solution. At first, after each injection, severe opisthotonos and extreme cyanosis resulted. After the second injection, the patient slept better, and, after a time, the injections being repeated, the spasms diminished and then ceased.

Gontermann insists that the drug must be freshly prepared, as it spoils on being kept, and should be first tested on animals before being used.—*Berlin. klin. Wochen.*, 1883, No. 44.

FUNCTIONAL SPASM OF THE STERNO-CLEIDO-MASTOID AND TRAPEZIUS, TREATED WITH STATICAL ELECTRICITY BY DR. DUBRUEIL.—The patient was first treated with statical electricity combined with general treatment (bromide of potash, douches, etc). The statical electricity, after two sittings, produced only an exaggeration of the symptoms; and, accordingly, the galvanic current was substituted for eight days without benefit. Regimbeau, to whom the patient had been entrusted, determined to return to statical electricity. Improvement immediately set in, and the

patient, who had entered the hospital May 2d, was able to leave completely cured on June 25th. The electricity was applied three times a week, for half an hour at a sitting, in the following manner: Three electrodes were used, one being placed over the upper region of the neck behind, the second over the side of the neck, and the third over the lower part of the sterno-cleido-mastoid muscle. After each sitting the stiffness was increased, but this wore off at the end of an hour. At the end of eight days the shoulder had completely returned to its normal position, and the patient was able to hold his head straight and turn it completely to the right.

The success of this treatment is interesting, considering the insufficiency of almost all other methods of treatment, including galvanism, and may turn out to be of more extended practical value.—*Rev. des sciences médicales*, 1884, No. 45.

A SIMPLE OPERATION FOR FACIAL NEURALGIA.—Dr. J. F. Heustis reports a case of facial neuralgia which is of interest from the simplicity of the operation employed with success. It is described as follows:

A. E. L., an old gentleman, past seventy, of fine constitution and very healthy in every respect, except being a sufferer from tic-douloureux, has consulted me several times in the last year for his complaint, and has taken the various remedies likely to benefit him, with very little relief. As he continued to suffer more and more, I advised him to let me operate on him as the only means of relief. But the neuralgia being general, affecting the branches of both the supra- and infra-orbital nerves, I could not promise him with entire confidence that an operation on the infra-orbital nerve would be sufficient, although that seemed to be most affected. The pains would dart all over the side of the head and face at the least touch, even of a hair of the head or beard, or from the impression of a breath of air, or even from the movement of the jaws in mastication. His suffering became so great and constant, and the neuralgic attacks so severe from attempts to eat, that he began to run down from sheer exhaustion from want of food, and pain.

He was so weak at the time of operation, that it was a very important matter at his advanced age to make the operation as simple as possible, consistently with the hope of permanent relief. Therefore, discarding Carnochan's operation of trephining the antrum and following up the nerve beneath the orbit, and removing it; and Langenbeck's slighter one, of dividing the nerve far back in the orbit with a tenotome, and drawing it out through the infra-orbital foramen, I merely cut down upon the infra-orbital foramen, and with a fine steel drill, such as dentists use, improvised of piano wire, drilled out the nerve in its entire length, as far back as the spheno-maxillary fissure. The immediate effect of the operation was to abolish all sensation in the previously sensitive parts, and to enable him to use his jaws without suffering the

darting pains he formerly had. And not only was the sensitiveness of the face relieved, but also that of the side of the head, showing that the trouble was in the distribution of the infra-orbital nerve, and that the affection of the branches of the supra-orbital was a reflex one. Barring some swelling of the face, he had no trouble afterward. The wound soon healed, and he had been able to expose himself to the air, and eat with impunity, and now, although nearly two months have elapsed, he remains free from pain and is enjoying excellent health.—*Med. News*, Dec. 8, 1883.

THE TREATMENT OF NEURALGIA BY INJECTIONS OF OSMIC ACID.—A. Eulenburg (Berlin) was induced by the results obtained by G. Neuber to try this method on a larger scale. Delbastaillé had previously employed parenchymatous injections of osmic acid in the treatment of tumors (especially sarcomata and scrofulous lymphomata). Neuber later used similar local injections in three cases of severe obstinate neuralgia, one of trigeminal and two of sciatica. All three were cured. Eulenburg used the injections in twelve patients, which were mostly fresh and not unusually severe cases, and included neuralgias of the upper and lower extremities, of the head and lumbar region. The time during which the treatment was continued was from one to six weeks. The number of injections in each case varied from three to fourteen; the total number of injections, eighty-two. The injections were made into the neighborhood of the diseased nerve, if possible in the connective tissue surrounding the nerve. Of the twelve cases only three were considered cured—no return of the pain in from two to fourteen weeks; four were somewhat improved; five unaffected. The usual dose was .005 gm.

In a second series of seventeen cases the result obtained was about the same, viz.: four cured (sciatica, 2; lumbar, 1; intercostal, 1).—*Berlin. klin. Wochen.*, 1884, No. 7.

THE EFFECT OF THE MAGNETO-ELECTRIC CURRENT UPON DEGENERATED NERVES AND MUSCLES.—A. Eulenburg has also studied the effect of the magneto-electric current as compared with the ordinary faradic (voltaic) current. In ten cases which showed simply *quantitative* (diminished) changes to both the faradic and galvanic current, he found that the reaction to the magneto-electric and the faradic (voltaic induced) for both nerves and muscles was exactly similar.

Also in three cases showing *quantitative* and *qualitative* alterations (reaction of degeneration) the behavior to the magneto-electric and the faradic currents was the same. In the fourth case, on the other hand, a difference was observable. The case was one of severe facial paralysis, with exaggerated reaction of degeneration. After about seven months regeneration set in, contrary to expectation. The reaction to the galvanic current had already changed for the better, and the trunk of the facial nerve gave a slight reaction to the faradic current. The muscles, on the

other hand, gave not a trace of reaction to the latter current. A month later, these conditions remained the same, but on applying the magneto-electric current it was found that both nerves and muscles plainly responded, although the contractions were weaker than on the sound side. Ten days later, the first trace of contraction appeared with the ordinary faradic current.

Eulenburg concludes "that in general the irritability for both the magneto-electric and voltaic-electric (induced) currents is the same, but that in individual cases the irritability of degenerated muscles returns earlier for the magneto-electric than for the voltaic-electric current, and possibly for the former later lost (?)."

The use of the magnetic current might in some cases be turned to practical advantage. At any rate the subject deserves further study.—*Neurologisches Centralblatt*, 1884, No. 3.

STATIC ELECTRICITY IN MYALGIA.—Dr. Andrew Heermance Smith recommends this form of electricity as being particularly efficacious in muscular rheumatism. He reports several cases, acute and chronic, which were cured by one or more sittings.—*Archives of Medicine*, April, 1884.

NERVE-STRETCHING FOR THE RELIEF OF PAIN.—A lecture lately delivered by John Marshall (*British Med. Jour.*, Dec. 15, 1883) contains some valuable information on this subject, gathered from various sources, and gives a good *résumé* of the subject. Marshall inquires: First, how far can a nerve be palpably stretched? Second, how much weight will a nerve bear? Third, the effect of stretching on the structure of the nerve. Fourth, the physiological effects of stretching. Fifth, are the mechanical effects of stretching transmitted to the spinal cord? Sixth, the therapeutic effects.

To the first question he answers that nerves are extensible to a certain degree, but to a much slighter extent than would be imagined,—not as extensible as arteries, but more than tendons. After being stretched, a nerve, by virtue of the elasticity of its sheath, recoils to near its original length. A nerve, *e. g.*, that has been stretched $\frac{1}{4}$ of its length recoils to $\frac{1}{40}$. A living nerve is more elastic than a dead one.

The breaking-weight varies with different nerves, according to their size, and has been found to differ extraordinarily with different experimenters. For the sciatic (after death) the lowest weight given is 82 pounds, and the highest 288 pounds (Trombetta). Stintzing found, as a result of experiments on living animals, that the great sciatic will bear 1.8 of the body-weight. Hence, taking the average weight of the human body at 150 pounds, the great sciatic will bear 83.3 pounds.

The safe strain for a healthy sciatic (man) may be reckoned at 60 pounds; for a diseased sciatic, 30 pounds.

The structure of the nerve is profoundly altered. The motor properties and the sensory properties are both of them diminished,

though the sensory are not so intensely affected as the motor. The reflex functions, curiously enough, are not so suddenly affected as either the motor or the sensory, while the irritability, *i. e.*, its power of conducting impressions, is increased by moderately strong pressure, and is only diminished when the tension is made very great.

In regard to the fifth question, the results of experiments have shown that while the spinal ganglia and sheaths of the roots may be mechanically moved, the cord itself is not disturbed.

From an analysis of 252 cases, Marshall concludes that nerve-stretching is best adapted for the cure of neuralgia, in which the successes are very great. Out of 168 cases of neuralgia of all kinds in which the operation was done, 142 successes (including sixteen partial) are recorded, twenty-four failures (seven doubtful), and two deaths.

The subcutaneous or "bloodless" operation is recommended as worthy of a trial. Horsley has found that he can stretch the sciatic on the dead body by this method, while among others, Lange, Trombetta, Stintzing (and it may be added Lepinè and Shrady) have employed it for the relief of pain, and obtained satisfactory results.

* It certainly should be tried before resorting to the cutting operation. No evil results follow this method, which is performed as follows: The patient is etherized, and the thigh is forcibly flexed upon the abdomen, the leg extended, and the foot flexed on the leg. The pressure should be firm and kept up for five minutes.

That nerve-stretching may not be entirely free from danger is shown by the following case reported by C. Westphall (*Centralblatt f. Med. Wissenschaften*, 1883, No. 48), who cut down upon and stretched the right sciatic to relieve symptoms of spastic paralysis. These symptoms were relieved upon the side operated upon, but there ensued permanent incontinence of urine and fæces, contraction of legs, and extensive decubitus. These symptoms gradually increased, hemianæsthesia and ataxia developed, and death occurred three years after the operation. Autopsy: Small patches of degeneration in the brain, pons, and medulla; diffuse degeneration in the cervical and dorsal spinal cord, and multiple centres of degeneration in the right half of the lumbar cord. Westphall thinks that the last were due to direct injury of the cord by the operation.

REFUSAL BY THE INSANE TO TAKE FOOD.—F. Siemens disparages forcible feeding of the insane. He thinks the dangers of fasting to such patients not so great as is generally supposed. The abstinence from food in most cases depends upon disturbances of innervation and tissue metamorphosis, and consequently only a symptom of a morbid bodily condition. Therefore feeding should no more be compulsory with the insane than with the sane who suffer from similar bodily conditions. With the insane the retardation of tissue metamorphosis gives to the body the capacity to do with little food.

The danger to such as refuse to take food from purely psychical causes (delusions) is not great, so long as the fast does not last over fourteen days without water, or over fifty days with water, and so long as not over forty per cent. of the body-weight is lost.

A peculiar fetor of the breath is noticeable during the fasting condition. The same odor is possessed by the urine, which also gives a reaction which has been much described of late, namely, a red color with chloride of iron. The best treatment, S. maintains, is to train such patients to take their food of their own accord, and to regularly set food before them, so that the need of it may be satisfied when the time comes.

A number of illustrative cases are given, including one where the fast lasted thirty-three days without injury.—*Neurologisches Centralblatt*, 1884, No. 6.

ERYTHRINA CORALLODENDRON IN MENTAL DISEASES.—Rey has experimented with this drug in a variety of mental affections, and found that in the majority of cases its action was quieting and hypnotic. Its most remarkable physiological effect is slowing of the pulse from eight to sixteen beats in the minute. In the maniacal excitement of general paralysis it has no effect. It deserves further trial.—*Annales méd. psychol.*, Sept., 1883.

MANIACAL DELIRIUM TREATED BY THE COLD DOUCHE.—Dr. Thomas Barlow reports a case of what was probably exaggerated delirium tremens, probably also complicated with pleuro-pneumonia. The patient had not slept for three nights and four days, and was so wild that no examination could be made. Large doses of chloral, bromide, and morphia had been given without effect, and Dr. Barlow determined to try the plan recommended by Dr. Broadbent (*Lancet*, March 24, 1883). The patient was stripped and a spongeful of cold water squeezed down his neck and back, and then freely splashed over his face and chest. It quieted him immediately. He said it was nice, and was well pleased to have it repeated. He was then vigorously rubbed and dried, and strong broth given. He slept four hours, and then woke and was violent again. He was douched again as before, and once more lay down and slept quietly. No delirium after this. A good recovery was made, notwithstanding a slight attack of pleuro-pneumonia which Dr. Barlow thinks existed before the cold water was used.—*Lancet*, Jan. 5, 1884.

THE USE OF HYOSCYAMINE IN THE TREATMENT OF MENTAL DISEASES.—Dr. Metcalf, Superintendent of the Kingston Asylum, in a paper read before the Canada Medical Association, recommends subcutaneous injections of hyoscyamine in acute mania. The full hypodermatic dose for an adult male is $\frac{1}{16}$ grain, for adult female $\frac{1}{32}$ grain, given once a day. The full physiological effects are produced. Thus given it acts in about twenty minutes. He gave in detail the history of numerous cases of acute mania, in

which the attack was cut short by the use of the drug. In cases where it failed to cut short the attack it usually ensured a good night's sleep, and no ill effects followed.

Dr. Hurd added his testimony to that of Dr. Metcalf as to the benefit from the drug in acute mania, and also in melancholia. In the latter disease he gives $\frac{1}{4}$ to $\frac{1}{2}$ grain by mouth. Would not give it in fatty degeneration of the heart.—*Canada Med. and Surg. Jour.*, Sept., 1883.

EXPERIMENTAL RESEARCHES ON THE HYPNOTIC AND SEDATIVE ACTION OF PARALDEHYDE.—Prof. Morselli, of the Royal Asylum of Turin, publishes the following statements in regard to the use of paraldehyde as an hypnotic in mental disease. He has administered it about 350 times in various forms of insanity, and finds it more especially useful in the more active types of the disease (mania), while the more depressed conditions (melancholia) are less affected by an equal dose. In all cases where it acts it produces a refreshing sleep, and it is quite free from the disadvantages attached to chloral hydrate. Unlike the latter, it is not contra-indicated by morbid conditions of the circulation and respiration.

The dose recommended is about three grammes, which in most insane patients is sufficient to produce an uninterrupted sleep of from four to seven hours' duration. The author does not state whether the patients gradually accustom themselves to the drug as to most other sedatives or how long it retains its original effect.—*Gazzetta degli Ospitali*, Jan. 14-17-21, 1883, Nos. 4, 5, and 6.

THE OPIUM HABIT: ITS SUCCESSFUL TREATMENT BY THE AVENA SATIVA.—In a paper originally read before the New York State Medical Society, and now published in pamphlet form, Dr. E. H. M. Sell reports some cases of opium habit treated by Avena Sativa. The cases are unfortunately very unscientifically reported, so that it is difficult to judge of the value of the treatment. In spite of this, Dr. Sell adduces some strong evidence in favor of the drug in two or three cases. The others are of no particular value. The preparation used is the concentrated tincture of Avena Sativa or common oats. In the same pamphlet Dr. Sell publishes a paper by Dr. H. H. Kane, who criticizes the treatment unfavorably, and states that he has used the drug in 29 cases in the De Quincy Home without any benefit whatsoever.

CYANIDE OF GOLD AND POTASSIUM IN THE TREATMENT OF OPTIC-NERVE ATROPHY OF TABES.—Galezowski has used with considerable success hypodermatic injections of cyanide of gold and potassium in a case of atrophy of the optic nerve, consecutive to syphilitic locomotor ataxia. The ataxia was stopped and the sight very sensibly improved. The dose employed was five milli-

grammes, afterwards increased to ten milligrammes, given every day or every other day. He gives, in response to inquiries, the following formula, which should be carefully prepared :

Cyanide of gold and potassium	20 centigrammes
Distilled water	10 grammes

A fresh solution is more active and less irritating than one which has been kept some time. The injections should be made by preference in the back along the spine. Care should be taken that they are made some distance from one another, and deep in the cellular tissue. If made in the skin itself they cause necrosis, abscesses, and phlegmonous inflammation. These accidents can be prevented if the directions given are followed.—*Gazette des hôpitaux*, 1884, pp. 11 and 227.

METALLO-THERAPY IN THE TREATMENT OF OCULAR AFFECTIONS.—Under this heading Drs. Arthur Johnstone and L. Webster Fox publish three cases of “hyperæsthesia of the retina,” but “complicated with neurotic symptoms.” This seems very much like the tail wagging the dog, as the first and third cases were undoubtedly general neurasthenia, and the second hysteria with hemi-anæsthesia, the eye symptoms being part of the general condition. However, the results obtained by the authors were striking and interesting, and suggest that metallo-therapy, whatever be its *modus operandi*, might be more extensively used than at present on this side of the water. The principal eye symptoms observed in all three cases (which it should be said were protracted chronic cases) were hyperæsthesia of the retina and hypermetropia. In the first two cases the defect of vision had been corrected by glasses without effect on the other symptoms. Accordingly resort was had to metallo-therapy, after Burq’s method. Complete success followed in all three cases.

The logic indulged in (for which not the authors but their “illustrious preceptor, Dr. Burq,” is responsible) is a curiosity in its way.

In the first case the patient was found “sensitive to *steel*,” and consequently, according to the logic of metallo-therapists, tincture of the chloride of iron was given internally. On what principle of philosophy this is founded it is difficult to imagine, but probably, like most philosophy, passeth understanding. However, the result was good, which is the main point. We suspect that this depended more upon moral influences than upon either the physical effect of steel or the chemical effect of its tincture. As the patient had previously been under the care of ten other oculists, and “at the hands of several went through thorough and varied courses of medication,” it would not have been superfluous to have mentioned whether *steel* in any of its compounds had been prescribed before, though an affirmative answer might have destroyed the delusion as to the method of cure in metallo-therapy.

The second patient was found sensitive to gold and accordingly treated, while the third was again treated with tinct. ferri chl.

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